IN THE MATTER OF
the Utilities Commission Act,
S.B.C. 1980, c. 60, as amended

and

IN THE MATTER OF
an Application and an Alternative Application
by Pacific Coast Energy Corporation for
an Energy Project Certificate to Construct
and Operate Natural Gas Pipeline
Transmission Facilities to and on Vancouver Island

EXECUTIVE SUMMARY
PHASES I, II AND III

April 6, 1989

Before:

J.G. McIntyre, Chairman
N. Martin, Commissioner
F.C. Leighton, Commissioner

EXECUTIVE SUMMARY

The purpose of the Executive Summary is to consolidate and highlight the most important findings resulting from the Commission's hearing of the Pacific Coast Energy Corporation Application for an Energy Project Certificate to construct and operate a natural gas transmission pipeline to Vancouver Island. The evidence and rationale supporting the Commission's findings are contained in the full report documents. The Interim Report dated March 14, 1989 provides a detailed review of facilities, capital costs, environmental and socio-economic matters. The Final Report dated April 6, 1989 reviews the market, gas supply and financial matters.

OVERVIEW

- The Pacific Coast Energy Corporation proposal to transmit natural gas to Vancouver Island offers service to the maximum number of residential and industrial customers at the lowest cost.

- The Commission is satisfied that the project is technically feasible and that it can be constructed at a cost close to the $248 million estimated by the proponent. No intervenor challenged the project's feasibility, although some expressed concerns related to the risk of cost overruns and/or the need for fiscal monitoring during construction.

- Both local distribution companies involved in the project, Vigas (a subsidiary of Inter-City Gas) and Squamish Gas (a subsidiary of BC Gas), expressed their general support of the project. Each, as a local distribution company, expressed concerns related to its own specific distribution interests.

- Forest products mills which will provide two-thirds of the initial natural gas market, through the Council of Forest Industries, expressed their general support of the project. However, they had specific concerns related to cost and to their mill operations.

- Two of the largest communities on the route of the main transmission pipeline were visited by the Commission during the course of the hearing, namely Powell River and Nanaimo. Both expressed their support for the project through official delegations.

- Both the Canadian Petroleum Association and the Independent Petroleum Association of Canada provided limited support for the project, but expressed concerns over Pacific Coast Energy Corporation's proposal to purchase all gas requirements for the project.

- The Commission is satisfied that the long-term air quality benefits resulting from expansion of gas service to Vancouver Island, and the reduction of pollution risk from waterborne fuel oil transport can be achieved with only minor short-term environmental impact from pipeline construction. The Commission believes that environmental issues were thoroughly reviewed during its public hearing process, which included participation by Federal Government agencies (Department of Fisheries and Oceans, Department of Environment, Department of Energy, Mines and Resources). In view of the commitments made by the Applicant, reinforced by the conditions recommended by this Commission for attachment to the Energy Project Certificate, the Commission believes that further public hearings under the Environmental Assessment and Review Process should not be necessary. The Commission proposes specific measures to minimize environmental impacts and to ensure responsive monitoring during construction.

- Construction of the natural gas pipeline will generate substantial short-term socio-economic benefits for most of the communities along its route, and modest long-term employment increments for some of the communities. More importantly, the Commission believes the long-term benefits of enhanced property tax revenue and of the greater industrial diversification opportunities presented by the pipeline will be significant for the communities affected.

- Despite the above-described support for the pipeline concept, there are practical difficulties in launching a project of this magnitude. The complexity of contractual arrangements, almost all of which are inter-linked, frequently requires conditional agreements and makes consummation difficult.

  The inter-governmental Binding Agreement, which has yet to be signed, is a case in point. Despite the very considerable support for the project, evidenced by the financial commitments of both the Federal and Provincial Governments set out in the Statement of Principles, a final document essential to commencement of the project is not yet available.

- If the project is to achieve its projected in-service date of September 1, 1990, construction must begin in early May 1989. Failure to meet this target date will almost certainly result in a full year's delay in completion due to the seasonal nature of marine construction. Such a delay will almost certainly add to construction cost. The Applicant has attempted to expedite the project to the maximum extent possible by securing firm bids on pipe (already in hand) and by calling tenders for construction of the on-land portion of the pipeline. These are due on April 18, 1989. Pipe orders must be confirmed by May 4, 1989 if the below-budget prices obtained are to be realized.

- The Commission has recognized the time constraints under which all parties to the hearing operated and has done its utmost to accommodate the Applicant and Intervenors by flexible phasing and expedited sittings throughout the 30 day hearing. The hearing process was complicated by the absence of firm agreements among the parties involved.

- In an effort to help resolve some of the outstanding technical problems the Commission has offered, and continues to offer, the assistance of its members and staff to the parties involved.

RECOMMENDATIONS

In light of the apparent desire of all parties to see the project brought to fruition, but with its concerns for the broader public interest in mind, the Commission makes the following recommendations (refer Section 6.2, Final Report and Section 5.0 of Interim Report):

1. The Commission recommends that an Energy Project Certificate be granted to Pacific Coast Energy Corporation conditional on its satisfying the following primary conditions:

   (a) That Pacific Coast Energy Corporation obtain firm long-term agreements for the supply and seasonal storage of gas for the project, in sufficient volume to supply at least the third year demand, capable of meeting core market policy tests and under pricing terms satisfactory to the Provincial Government.

   (b) That Pacific Coast Energy Corporation obtain long-term gas sales agreements with the industrial customers.

   (c) That the foregoing be completed and approved by Government by May 4, 1989.

(d) That satisfactory construction bids for installation of land portions of the pipeline be received by Pacific Coast Energy Corporation on April 18, 1989 which, together with existing firm pipe quotations, are equal to or lower than the sum estimated by Pacific Coast Energy Corporation for these items in its Application.

The risk to the Provincial Government through the Rate Stabilization Facility, which would result from Pacific Coast Energy Corporation's failure to negotiate a satisfactory long-term gas supply contract cannot be overstated. These risks are clearly demonstrated by the sensitivity tests applied to the project pro forma financial statements set out in Section 4.0 of the Phase III report. For this reason, and because of the critical deadline for the commencement of construction, the Commission further recommends that a designated representative of the Provincial Government be appointed to participate in the execution of the foregoing recommendation to ensure prompt approval of price, terms and conditions as they are negotiated.

During the hearing, many financial runs were made covering a wide range of assumptions. The Commission has now prepared three cases. The central one represents the probable conditions (base case), the others reflect the upper and lower limits of each variable within a reasonable range, yet excluding extreme circumstances. In the optimistic case, the Rate Stabilization Facility would not be required at all, while in the pessimistic case, the Rate Stabilization Facility exposure is $270 million. In the base case, the Rate Stabilization Facility would rise to $13 million and would be repaid in full in 1997. The predictions are heavily dependent on oil price forecasts.

The second most critical component of the project is containment of capital costs. The pipe supply contract and on-land pipelaying contract (for which tenders close on April 18, 1989) together represent 69% of the total project cost. It is for this reason that condition 1(d) above is recommended.

2. The Commission recommends that the route proposed for the pipeline by the Applicant be approved subject to minor line adjustments which may be required for environmental reasons during construction. The Commission is satisfied that preliminary explorations of the marine crossings are adequate to establish route and basic feasibility. However, the Commission recommends that Pacific Coast Energy Corporation advance its marine surveys to the earliest possible date and expedite geological evaluation and a test coring program at the southern Texada Island approach. This will ensure receipt of bids on the directional drilling alternative before a commitment is made to open-slope blasting.

3. The Commission recommends that a Project Monitoring Committee be established and that it should comprise one representative from the Federal Government Department of Fisheries and Oceans, one representative from the Provincial Government ministry responsible for administration of the Pipeline Act and one representative of the British Columbia Utilities Commission.

This recommendation is in direct response to the Terms of Reference. Details of the proposed Committee Structure appear in Section 4.6.3 of the Phase I and II report.

4. The Commission recognizes the large increase in environmental protection activity which construction of the gas pipeline will generate and is cognizant of the limited manpower resources of both Federal and Provincial Fisheries agencies. It therefore recommends that issuance of an Energy Project Certificate to construct be conditional on Pacific Coast Energy Corporation committing the funds necessary to assist these agencies to supplement their inspection manpower during the period of pipeline activity, to a level satisfactory to the Project Monitoring Committee.

5. The Commission recommends that Pacific Coast Energy Corporation complete an outline of its Environmental Protection Plan no later than April 30, 1989 and forward it to the Project Monitoring Committee with a detailed reference as to how each element of the Plan has been or will be incorporated into the contract documents.

The Commission is concerned that all details of the Environmental Protection Plan are not in place, yet Pacific Coast Energy Corporation proposes to award construction contracts for the on-land portions of the pipeline by May 4, 1989.

6. The Commission recommends that the pipeline be constructed through the Greater Vancouver Water District Coquitlam watershed but that approval be conditional on satisfactory implementation of specific environmental conditions by Pacific Coast Energy Corporation. (Refer Section 4.4.1.3 of the Phase I and II Interim Report.)

The Commission recommends that the pipe size be increased from 273.1 mm O.D. to 323.9 mm O.D. through the Greater Vancouver Water District Coquitlam watershed to eliminate further intrusions for construction purposes should looping of the pipeline be required in the future.

The Commission also recommends that the proposed routing through the Greater Victoria Water District property be retained, subject to the Applicant meeting specific conditions. (Refer to Section 4.4.2, Phase I and II Interim Report.)

7. In its Interim Report on Phase I and II, the Commission made the following statement in Section 5.1.2:

> "The Commission is satisfied that the project can be constructed at a cost very close to the $248 million estimated by the Applicant. However, it recommends the addition of $7 million to the marine portion of the estimate."

In Phase III of the hearing it became evident that the complex problem of peak shaving not only had to be resolved but also presented possible additional capital exposure in the range of $6 million to $30 million. (Refer to Sections 4.0 and 6.3 of the Phase III report.) These possible additional costs have been incorporated in the Commission's financial analyses.

8. The Commission concludes that insufficient evidence was advanced to permit a rational and timely resolution of the appropriate allocation of peak shaving responsibilities among the participants. The Commission recommends that this complex problem be resolved by the intervention of the Commission with the Local Distribution Companies, the Industrials and Pacific Coast Energy Corporation under Part 3 of the Utilities Commission Act. Since the Commission's financial models incorporate a range of peak shaving possibilities, the Commission believes that the optimum solution can be achieved after the issuance of an Energy Project Certificate.

9. The Commission recommends that transportation service by Pacific Coast Energy Corporation not be offered at this time due to timing constraints on completing the project by September 1990. However, if the project is substantially delayed the Commission recommends that transportation service then be incorporated into the project structure.

10. The Commission makes the following specific recommendations related to construction of the marine pipeline:

10.1 The Commission recommends that it be a condition of the Energy Project Certificate that, in order to ensure the integrity of the corrosion protection, an appropriate abrasion-resistant coating be applied to the full length of the exterior of any marine pipeline laid by the bottom-tow or bottom pull methods.

10.2 The Commission recommends that the manifold and valving near the north end of Texada Island be placed on land.

10.3 The Commission recommends alternative methods of pipe stabilization to eliminate plow trenching.

10.4 The Commission also recommends an early program of ocean current measurement on the south Texada Island marine approach over the full depth range and as close to the submerged rock slope as possible, to determine the risk of vortex excited oscillations in the pipeline, should anchorage on the open slope eventually be necessary.